

**Amendment to the Specification:**

**Please replace the paragraph starting from "Down and feather as -  
----"on page 1, line 9 with the following amended paragraph:**

Down and feather as good natural heat-retaining material are widely used in feather-wear, quilt, comforter and the like. However, as the shape of down has likes fluffy cloud shape and feather has barbs and quill, the feather products ~~made from down and feather~~ are unstable, shaggy, and bulky. In addition, processes for producing down and feather products become very complex and inefficient. As a result, resources not only natural (raw and processed materials) but also human (labor productivity) are wasted. Furthermore, feather has a flat shape with an inflexible shaft located in its middle; barbs are grown on the shaft with 50-micron separation. Only the very soft part of the feather can be used for making feather wadding in the traditional feather product industries. The most part of the feather are abandoned due to hardness of shafts. Thereby, resource waste is serious.